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homemakers' chat

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U. S. DEPARTMENT
OF AGRICULTURE

Wednesday, April 1, 1942

Subject: "Knocking on Wood." Information from wood experts of the U. S. Department of Agriculture.

--ooOoo--

April First is an appropriate day to mention the Nation-wide custom of knocking on wood. If folks are superstitious enough to think knocking on wood changes the course of events in this world one way or another, they're fooling themselves.

Wood is important though, especially now that it is taking the spotlight in substituting for strategic metals needed to win the war. So a knocking-on-wood-day like this is as good a time as any to tell off a few common fallacies about wood.

One common but inaccurate idea is that wood does not resist heat as well as steel. It is true that at 570 degrees Fahrenheit, wood turns to charcoal. And it's also true that the same temperature hardly affect steel at all. But when a fire gets under way, reaching a temperature of 1500 or 2000 degrees, that's when wood sometimes has the advantage, because wood is a poor conductor of heat.

At a very high temperature, steel heats through rapidly, and may lose its strength, and drop its load sooner than wood. Yes, a wooden beam or thick plank may burn or char on the outside while the inside remains untouched.

For example, if your barn were on fire and it was only a question of minutes or seconds whether you could save your livestock, the extra support given to the barn by heavy timber framing, as compared with light steel members, might make all the difference.

Another fallacy is the mistaken belief that wood decays with age. Last fall during dredging operations at the Navy Yard at Brooklyn, workmen uncovered live oak timbers believed to have been intended for building Civil War wooden naval vessels. Naval authorities explain the find this way. They say the Civil War brought a ship-building boom to the Navy Yard. Five thousand men worked day and night turning out

14 large vessels. With the usual decline in naval construction after the war was over, the left-over wood was placed in a timber basin as the accepted method of preserving it in the old shipyards. Becoming waterlogged, the wood gradually sank to the bottom. As long as it remained under water, it would not rot. Today the timbers are in perfect condition. In fact, an official said they would be "unmatchable" for keeping some of the 144-year-old frigates in their original condition.

We have other proof that time or age, in itself, has nothing to do with decay in wood. Here are some. When the White House was remodeled in 1928, workers found sound roof timbers that had been in place for more than one hundred years, since 1816. At Dedham, Massachusetts, the Fairbanks house, made of wood, has been standing structurally intact after 3 centuries.

Can you imagine looking at a piece of wood 12 million years old? Not long ago in the State of Washington workmen found a log seven feet in diameter, in a tunnel they were digging 150 feet below the bed of the Yakima River. They sent a piece of the log to the Forest Products Laboratory at Madison, Wisconsin, where experts identified it as sequoia, a species of sequoia now extinct, and estimated its age at 12 million years!

These incidents prove that wood does not necessarily decay with age. What causes decay is a plant or fungus that causes wood to decay. When wood lasts a great many years, it has either been kept dry, or it has been kept wet, thoroughly saturated, or it has been in weatherproof structures or in a dry climate.

Two conditions that bring about decay of wood are dampness and weather that's mild-to-warm. If you build a porch over damp ground, you can expect the worst. Sills of untreated wood are sure to rot if they rest directly on damp ground. The same thing applies to untreated posts and poles, set in the ground, where they're exposed to ideal conditions for fungus attack. Their service usually ends in decay near the ground line, no matter what kind of wood they're made of.

Every spring many people write the U. S. Department of Agriculture asking how to prevent cottonwood trees from throwing off "cotton." Here's another fallacy to discuss on April Fool's Day. You can't do much to a cottonwood to keep it from littering your grounds with cotton, though spraying it thoroughly with a 2 to 4 percent solution of sulphuric acid might help if everyone in the community did likewise at the same time. The only way to keep a cottonwood tree from throwing off cotton is to cut it down completely and destroy the roots.

You probably know that some trees of this species produce cotton and others do not. It's the female of the species that spreads the fluff around. The best way to avoid this unpleasant characteristic of cottonwood trees is to plant only the male or staminate tree which does not give off cotton.

Some dealers in the past have taken advantage of the public's lack of knowledge about sex in cottonwoods, by advertising what they call a cottonless cottonwood tree that sold at exorbitant prices. They led gullible customers to believe the tree was developed at great expense after years of experimenting.

But all they had was the male of the common cottonwood that any one can get if he knows how to identify it, which is not difficult. The buds or young leaves of the male tree are large and of purplish color, whereas those of the female are small and light green.

So much for fallacies about forest products. Knock on wood, if it makes you any happier. Wood is one of man's best friends. It surrounds him from the cradle to the grave.

